METABOLIC DISTURBANCES IN OBESITY

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Background:

Sedentary lifestyle and readily availability of calorie dense foods lead to overweight and obesity, which are considered major health concerns of the modern world.

Overweight and obese subjects are at high risk of cardiovascular diseases and type 2 diabetes.

Aim of the study:

The aim of this study was to assess several parameters of metabolic health in overweight and obese subjects, with focus on early diagnostics of type 2 diabetes.

Patients and methods:

102 overweight or obese subjects (28 men and 74 women) were included in the study.

Oral glucose tolerance test (oGTT), lipid status, body mass index (BMI), waist circumference and blood pressure were measured by standard methods. Glycated hemoglobin (HbA_{1c}) was measured by immunoturbidimetric method.

Results:

Diabetic persons, both men and women, were slightly, but significantly older than nondiabetics, which highlights the importance of maintaining a healthy lifestyle in aging population. Both men and women with Diabetes mellitus tended to have higher BMI and waist circumference than nondiabetics, but the difference was not statistically significant.

In addition, overweight/obesity abolished the expected sex difference of HDL-cholesterol in both diabetics and nondiabetics.

13 men and 26 women were diagnosed with type 2 diabetes. Notably, HbA_{1c} was proven as more sensitive than oGTT for early diagnostics of Diabetes mellitus in this population.